

MATERIAL SAFETY DATA SHEET



DATE PREPARED: 11/15/1996

MSDS No: 5716

ORTHO CASORON Granules2

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ORTHO CASORON Granules2

PRODUCT DESCRIPTION: Herbicide

MANUFACTURER

The SOLARIS Group
of Monsanto Company

P.O. Box 5008

San Ramon, CA 94583-0808

EPA REG. NO.: 400-170-239 PN: 6030

24 HR. EMERGENCY TELEPHONE NUMBERS

Emergency Phone 800-454-2333

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Wt. %</u>	<u>CAS Registry #</u>
Dichlobenil, 2,6-dichlorobenzonitrile	2	1194-65-6
INERT INGREDIENTS	98 .0	

"Inert Ingredients" is a term defined by the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (40 CFR 158.153). It refers to any substance, other than an active ingredient, which is intentionally added to a pesticide product. Some inert ingredients may be hazardous chemicals, as defined by the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). The hazards associated with these inert ingredients have been included in this document.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Tan or grey granules

IMMEDIATE CONCERNS: - HARMFUL IF SWALLOWED

- AVOID BREATHING DUST
- AVOID CONTACT WITH EYES OR SKIN
- KEEP OUT OF REACH OF CHILDREN

POTENTIAL HEALTH EFFECTS

EYES: This product is moderately irritating to the eyes. Eye contact may include discomfort, tearing, swelling, redness, and blurred vision. See Toxicological Information, section 11.

SKIN: This substance is not expected to cause skin irritation and is only slightly toxic if absorbed through the skin. See Toxicological Information, section 11.

INGESTION: If swallowed, this substance is considered practically non-toxic to internal organs.

INHALATION: If inhaled, this substance is considered practically non-toxic to internal organs. This substance may be irritating if inhaled.

4. FIRST AID MEASURES

EYES: Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. No additional first aid should be necessary. However, if irritation persists, see a doctor.

SKIN: No first aid procedures are required. As a precaution, wash skin thoroughly with soap and water. Remove and wash contaminated clothing.

INGESTION: If swallowed, immediately telephone a poison control center, emergency treatment center or a physician for advice. Drink large quantities of water. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then immediately take person and product container, with label, to an emergency treatment center.

INHALATION: If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.

ADDITIONAL INFORMATION: Medical Information: Call day or night, 1-800-454-2333.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Nonflammable

EXTINGUISHING MEDIA: Use appropriate agent for surrounding fire - product is not combustible.

HAZARDOUS COMBUSTION PRODUCTS: No data available.

FIRE FIGHTING PROCEDURES: This material will not burn. Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse. Read the entire document.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Sweep up material and use according to label instructions or dispose of in the trash.

LARGE SPILL: Clean up spills immediately, observing precautions in Exposure Controls/Personal Protection section. Vacuum with machines equipped with high efficiency filters or sweep up material and place in a disposable container. Scrub contaminated area with detergent and water using a stiff broom. Pick up liquid with Oil Dry, cat litter, clay, rags or other absorbent and place in a disposable container. Dispose of in accordance with instructions in Section 13. "DISPOSAL".

GENERAL PROCEDURES: Observe all protection and safety precautions when cleaning up spills -- see Section 8. "EXPOSURE CONTROLS/PERSONAL PROTECTION". For help with any spill, leak, fire or exposure involving this material, call day or night (800) 454-2333.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Store in a dry location and keep container tightly closed. Do not store with propagative structures such as seed, bulbs, tubers, nursery stock, ect., or with food or feed products.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide natural or mechanical ventilation to minimize exposure. If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

PERSONAL PROTECTION

EYES AND FACE: Where there is significant potential for eye contact, wear chemical goggles and have eye flushing equipment available.

For application of product in accordance with label instructions, no special eye protection is needed.

SKIN: Wear appropriate protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type of glove for given

application. Wash contaminated skin promptly. Launder contaminated clothing and clean protective equipment before reuse. Wash thoroughly after handling.

RESPIRATORY: Avoid breathing dust. Use NIOSH/MSHA approved respiratory protection equipment (full facepiece recommended) when airborne exposure is excessive. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 29 C.F.R. 1910.134.

For application of product in accordance with label instructions, no special respiratory protection is required.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Granular

APPEARANCE: Tan or grey granules.

pH: No Data Available

COMMENTS:

WATER SOLUBILITY: Insoluble in water; slightly soluble in organic solvents.

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

INCOMPATIBLE MATERIALS: Avoid contact with alkaline materials.

11. TOXICOLOGICAL INFORMATION

ACUTE

EYES: The results of the rabbit eye irritation study indicate that this product is moderately irritating to eyes with all irritation clearing by day 7. EPA FIFRA toxicity category - III.

DERMAL LD₅₀: Slightly toxic, (Rat LD50 >2,000 mg/Kg). EPA FIFRA toxicity category - III. Non-irritating to skin (Rabbit). EPA FIFRA toxicity category - IV.

ORAL LD₅₀: This product is practically nontoxic if ingested. Rat LD50 => 10 g/kg. EPA FIFRA toxicity category - IV.

INHALATION LC₅₀: This product if inhaled is practically nontoxic. 4 hour inhalation LC50 for rats > 5.0 mg/liter/hour. EPA FIFRA toxicity category - IV.

SENSITIZATION: No product toxicology data available.

CHRONIC: The feeding to rats of up to 100 ppm Dichlobenil for two years did not produce significant adverse effects and no evidence of carcinogenicity. A three-generation rat reproduction study at up to 100 ppm daily demonstrated a no observable effects level (NOEL) of 20 ppm. The feeding to dogs of 20, 50 or 350 ppm Dichlobenil for two years demonstrated a no observable effects level of 50 ppm.

TERATOGENICITY: The dosing of mice with 60 mg/kg Dichlobenil had no effect on number of pregnancies, fetal number or fetal death.

COMMENTS: See Section 16 for definition of EPA FIFRA toxicity categories.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No data available.

ECOTOXICOLOGICAL INFORMATION: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

13. DISPOSAL CONSIDERATIONS

FOR LARGE SPILLS: Material collected that cannot be reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State or local procedures.

PRODUCT DISPOSAL: The Solaris Group is committed to responsible environmental practices and recommends that all of the product be used up, carefully following all label directions and precautions.

If necessary to dispose of partially filled product container, then securely wrap it in several layers of newspaper and discard in trash.

EMPTY CONTAINER: Do not reuse container. Wrap empty container in several layers of newspaper and discard in trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated

PRIMARY HAZARD CLASS/DIVISION: None

UN/NA NUMBER: NONE

PACKING GROUP: NO

U.S. SURFACE FREIGHT CLASS: Tree or weed killing compounds, NOI, Density of 20 lbs. or greater per cu. ft.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Not Regulated

SPECIAL SHIPPING NOTES: The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA				
ACUTE:	CHRONIC:	FIRE:	REACTIVITY:	PRESSURE
YES	NO	NO	NO	GENERATING: NO

313 REPORTABLE INGREDIENTS: No SARA 313 reportable ingredients.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All non FIFRA regulated components are on the US EPA's TSCA Inventory List.

STATE REGULATIONS

PROPOSITION 65 STATEMENT: No ingredients on list.

16. OTHER INFORMATION

HMIS CODES

FIRE: 0 HEALTH: 1 REACTIVITY: 0 PROTECTION: -

NFPA CODES

FIRE: 0 HEALTH: 1 REACTIVITY: 0 SPECIAL: -

APPROVAL DATE: 12/06/1996

REVISION SUMMARY New MSDS

MANUFACTURER SUPPLEMENTAL NOTES: EPA FIFRA (Federal

Insecticide, Fungicide and Rodenticide Act) Toxicity Categories: The EPA toxicity categories are based on the results of the acute toxicology studies. The toxicology findings are compared to the FIFRA criteria to determine the product label signal word, precautionary and first aid statements. The EPA FIFRA toxicity category summary:

EPA FIFRA Product Label Toxicity Rating
Toxicity Category Signal Word

I DANGER Most toxic and irritating
II WARNING
III CAUTION
IV CAUTION Least toxic and irritating

COMMENTS: For additional information concerning this product, call the SOLARIS Groups Consumer Helpline at 800-225-2883.

MANUFACTURER DISCLAIMER: This Material Safety Data Sheet (MSDS) contains health, safety and environmental information for you and your employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label. Information contained in this MSDS will help you to prepare for emergency response and to meet community right-to-know, emergency response and reporting requirements under SARA Title III and many other laws. Emergency response agencies and health care providers will also find this additional information useful.

Use of this product is regulated by the U.S. Environmental Protection Agency (EPA) through the approved label copy. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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